

Energy Policy Act of 2005, Section 1234

Economic Dispatch Study

Questions for Stakeholders

Section 1234 of the Energy Policy Act defines economic dispatch as “the operation of generation facilities to produce energy at the lowest cost to reliably serve customers, recognizing any operational limits of generation and transmission facilities.” With that definition in mind, please answer as many of the following questions as you wish, attaching supporting materials such as studies or testimony that was filed in state or federal regulatory proceedings to support your answer.

Please send your response by e-mail to Economic.Dispatch@hq.doe.gov **no later than September 21, 2005**. Be sure to include the name and phone number of an individual who can answer any questions that may arise about your comments. Thanks in advance for your assistance with this study.

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Questions

1) What are the procedures now used in your region for economic dispatch? Who is performing the dispatch (a utility, an ISO or RTO, or other) and over how large an area (geographic scope, MW load, MW generation resources, number of retail customers within the dispatch area)?

Kansas does not have retail competition. Each retail customer is served by a single certified retail electric supplier per Kansas statutes. Currently dispatch is performed by most Kansas utilities, with some smaller municipal utilities purchasing this service from larger transmission operators, and distribution cooperatives receiving this service from either their Generation and Transmission cooperatives or contracting for this service from larger transmission owning utilities (these examples would be “full requirements” wholesale agreements).

Kansas has 119 municipal utilities that serve , approximately 60 own generation. Nonetheless, they have limited transmission capability and for the most part only have transmission necessary to serve their own loads.

Kansas has 28 distribution cooperatives. All but 3 of these distribution utilities are full requirements customers of either Sunflower or Kansas Electric Power Cooperatives (KEPCO). Sunflower owns and operates generation and transmission facilities in the Western part of the state. KEPCO purchases transmission service and power for its member cooperatives (primarily in the center and eastern part of the state) and owns a share of the Wolf Creek Generating station as well as a 16 MW diesel generator facility. Midwest Energy is the sole vertically integrated Kansas electric cooperative, owning distribution and transmission, as well as a small amount of generation, purchasing the remainder of its required generation capacity.

In terms of retail customers, according to the 2003 DOE EIA numbers:

2003 Kansas Retail Electric Utility Information from EIA			
	Retail Customers	Retail Revenue	Sales (MWH)
Municipal Utilities	236,715	\$412,312,000	6,483,246
Investor Owned Utilities	952,229	\$1,582,022,000	26,334,623
Cooperatives	212,001	\$338,197,000	3,917,521

In Terms of Control Areas, from the 2005 SPP EIA Data the following are major Kansas Control Areas:

Kansas Electric Control Area 2004 Actuals Based on 2005 SPP EIA-411 Report					
		Demand (MW)		Capacity (MW)	
Control Areas Serving Kansas	Kansas Allocation*	Total	Kansas	Total	Kansas
Empire District Electric	6.55%	1,014	66	1,264	83
KCPL	43.98%	3,384	1,488	4,136	1,819
KS City KS BPU	100.00%	490	490	643	643
KGE	100.00%	2,105	2,105	2,905	2,905
KPL	100.00%	2,353	2,353	2,647	2,647
Midwest Energy	100.00%	315	315	421	421
Sunflower	100.00%	395	395	503	503
WestPlains Energy	100.00%	581	581	722	722
SouthWest Pub Serv	0.17%	4,352	7	5,381	9

Note: [* Based on kwh retail sales]

Currently the Southwest Power Pool (SPP) is working to implement an energy imbalance market as a part of its RTO development. This initiative will serve as regional dispatch and provide transparent local generation prices on a 5 minute basis. Currently SPP plans to implement the imbalance market before the summer of 2006.

2) Is the Act's definition of economic dispatch (see above) appropriate? Over what geographic scale or area should economic dispatch be practiced? Besides cost and reliability, are there any other factors or considerations that should be considered in economic dispatch, and why?

The definition of economic dispatch is appropriate. Geographic area or scale of dispatch should be as large as possible considering interconnection and transmission operator restrictions. Kansas is in the eastern interconnect, therefore it is not practical to attempt economic dispatch with Colorado or ERCOT. Regional differences may make inter-RTO economic dispatch more difficult. For example, MISO uses FTRs while SPP uses transmission rights and has not yet reached the decision to implement FTRs. It will be

difficult to attempt joint economic dispatch with another region if they have different locational pricing or transmission congestion schemes.

3) How do economic dispatch procedures differ for different classes of generation, including utility-owned versus non-utility generation? Do actual operational practices differ from the formal procedures required under tariff or federal or state rules, or from the economic dispatch definition above? If there is a difference, please indicate what the difference is, how often this occurs, and its impacts upon non-utility generation and upon retail electricity users. If you have specific analyses or studies that document your position, please provide them.

There is little non-utility generation in Kansas that is not committed under long term purchase power agreements (capacity and energy, or in the case of wind generation, all output) with incumbent utilities. Any available merchant plants in the region may be accessed in transmission is available. SPP is the regional transmission tariff administrator, but actual dispatch decisions are made by each utility. Utilities in Kansas all participate in the SPP regional transmission tariff.

4) What changes in economic dispatch procedures would lead to more non-utility generator dispatch? If you think that changes are needed to current economic dispatch procedures in your area to better enable economic dispatch participation by nonutility generators, please explain the changes you recommend.

To the extent there is a concern with non-utility generator dispatch in Kansas, we believe that successful implementation of the SPP imbalance market is a good first step.

5) If economic dispatch causes greater dispatch and use of non-utility generation, what effects might this have – on the grid, on the mix of energy and capacity available to retail customers, to energy prices and costs, to environmental emissions, or other impacts? How would this affect retail customers in particular states or nationwide? If you have specific analyses to support your position, please provide them to us.

In Kansas, retail customers served by vertically integrated utilities benefit from off-system sales from generating units that are in that utility's retail ratebase. For this reason any decrease in these off-system sales may have a negative effect on some retail customers. However, to the extent that overall generation prices are lowered any negative effects will likely be offset. For customers that depend on wholesale energy purchases for generation any gain in efficiency from the wholesale market will provide a benefit by lowering generation costs. SPP has recently completed a cost benefit study which indicates that the region will see benefits as it moves to a regional economic dispatch of generation in the imbalance market.

6) Could there be any implications for grid reliability – positive or negative – from greater use of economic dispatch? If so, how should economic dispatch be modified or enhanced to protect reliability?

Currently transmission owners must allow any wholesale generation buyer to utilize their system through FERC 888 open access tariffs. In the SPP transmission is scheduled on a regional basis. Market participants can already use any available transmission capacity. As long as any regional economic dispatch uses the current method of determining transmission availability and utilizes the same security coordination procedures the only difference may be to eliminate any market inefficiencies. This should have no effect on reliability.